#### REMARKS

The present application was originally filed with 29 Claims. In a Restriction Requirement mailed November 18, 2003, the Examiner restricted the Claims into 12 Groups:

Group I: Claims 1-4, 17, 28, and 29, drawn to a cutinase variant having a substitution of Gly at position 59 of SEQ ID NO:2;

Group II: Claims 1-3, 5, 24, 28, and 29, drawn to a cutinase variant having a substitution of Thr at position 177 of SEQ ID NO:2;

Group III: Claims 1-3, 6, 25, 28, and 29, drawn to a cutinase variant having a substitution of Thr at position 64 of SEQ ID NO:2;

Group IV: Claims 1-3, 7, 28, and 29, drawn to a cutinase variant having a substitution of Tyr at position 150 of SEQ ID NO:2;

Group V: Claims 1-3, 8, 26, 28, and 29, drawn to a cutinase variant having a substitution of Tyr at position 182 of SEQ ID NO:2;

Group VI: Claims 1-3, 9,-10, 12-18, 19, and 27-29, drawn to a cutinase variant having a substitution of Phe at position 180, Ser at position 205, and Ile at position 178 of SEQ ID NO:2;

Group VII: Claims 1-3, 11, 28, and 29 drawn to a cutinase variant having a substitution of Ala at position 166;

Group VIII: Claims 1-3, 18, 28, and 29, drawn to a cutinase variant having a substitution of Gly at position 61 of SEQ ID NO:2;

Group IX: Claims 1-3, 20, 28, and 29, drawn to a cutinase variant having a substitution of Arg at position 20, and Tyr at position 112 of SEQ ID NO:2;

Group X: Claims 1-3, 21, 28, and 29, drawn to a cutinase variant having a substitution of Ser at position 205 and Phe at position 207 of SEQ ID NO:2;

Group XI: Claims 1-3, 22, 28, and 29, drawn to a cutinase variant having a substitution of Ser at position 63 of SEQ ID NO:2; and

Group XII: Claims 1-3, 23, 28, and 29, drawn to a cutinase variant having a substitution of Ser at position 85 of SEQ ID NO:2

The Examiner argued that the Groups represent separate and patentably distinct inventions. In a Response filed December 16, 2003, Applicants respectfully traversed the restriction requirement and elected the Claims in Group VI (Claims 1-3, 9-10, 12-16, 19, and 27-29, drawn to a cutinase variant having a substitution of Phe at position 180, Ser at position

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205, and Ile at position 178 of SEQ ID NO:2). Applicants withdrew Claims 4-8, 11, 17-18, and 20-26, as being drawn to a non-elected invention. In the prior Office Action (dated January 29, 2004), the Examiner made the Restriction final. In the Response filed on July 15, 2004, Applicants cancelled Claims 4-8, 17-18, and 20-26. In order to avoid any additional confusion, Applicants also cancelled Claims 12-16, in order to correct the inadvertent omission of Claim 12 in the Response filed December 12, 2003. New Claims 34-38 filed in the Response filed July 15, 2004, correspond to Claims 12-16 with amendments to correct sentence structure. Independent Claims 19 and 28 herein have been amended to recite position 192, rather than "192 and/or 194." New Claims 39-50 correspond to the pending Claims, but with site 194 as the site for substitution at the main independent Claims (Claims 39 and 42). Applicants respectfully submit that no new matter is added in these new Claims and these new Claims find more than sufficient support in the Specification as filed.

Applicants appreciatively note that the Examiner removed a number of the previous objections and rejections. The Examiner has objected to Claims 2 and 29 as allegedly failing to further limit the subject matter of the Independent Claim. Applicants must respectfully disagree. Nonetheless, in order to further their business interests and prosecution of the present application, yet without acquiescing to the Examiner's arguments, Applicants have cancelled Claims 2 and 29 without prejudice. Indeed, Applicants reserve the right to prosecute any and/or all of the cancelled and/or amended Claims in one or more subsequently filed application(s).

The Examiner's rejections are addressed below in the following order:

- 1) Claims 1-2, 9, 19, and 27-38 remain rejected under 35 U.S.C. §112, first paragraph, as allegedly not meeting the written description requirement;
- 2) Clams 1-2, 9, 19, and 27-38 remain rejected under 35 U.S.C. §112, first paragraph, as allegedly not being enabled;
- 3) Claims 1-2, 9, and 27-38 stand rejected under 35 U.S.C.§103(a) as allegedly being unpatentable over Poulose *et al.*

# 1) The Written Description is Met

The Examiner has retained his rejection of Claims 1-2, 9, 19, and 27-38, under 35 U.S.C. §112, first paragraph, as allegedly not meeting the written description requirement. Although Applicants must respectfully disagree with the Examiner's arguments, in order to further their business interests and prosecution of the present application, yet without

acquiescing to the Examiner's arguments, Applicants have amended the Claims and cancelled Claims 2 and 29 without prejudice. Indeed, Applicants reserve the right to prosecute any and/or all of the cancelled and/or amended Claims in one or more subsequently filed application(s). The present Claims recite specific substitutions at position 192 and additional mutations, as well as specific substitutions at position 194 and additional mutations. Applicants respectfully submit that the present Claims find more than sufficient support in the Specification as filed and request that the present rejection be withdrawn and the Claims be allowed.

## 2) The Claims are Enabled

The Examiner has retained his rejection of Clams 1-2, 9, 19, and 27-38, under 35 U.S.C. §112, first paragraph, as allegedly not being enabled. As indicated above, although Applicants must respectfully disagree with the Examiner's arguments, in order to further their business interests and prosecution of the present application, yet without acquiescing to the Examiner's arguments, Applicants have amended the Claims and cancelled Claims 2 and 29 without prejudice. Indeed, Applicants reserve the right to prosecute any and/or all of the cancelled and/or amended Claims in one or more subsequently filed application(s). The present Claims recite specific substitutions at position 192 and additional mutations, as well as specific substitutions at position 194 and additional mutations. Applicants respectfully submit that the present Claims find more than sufficient support in the Specification as filed and request that the present rejection be withdrawn and the Claims be allowed.

# 3) The Claims are Unobvious

The Examiner has retained his rejection of Claims 1-2, 9, and 27-38 under 35 U.S.C.§103(a) as allegedly being unpatentable over Poulose *et al.* (U.S. Patent No. 5,352,594). As indicated above, although Applicants must respectfully disagree with the Examiner's arguments, in order to further their business interests and prosecution of the present application, yet without acquiescing to the Examiner's arguments, Applicants have amended the Claims to recite that the cutinase variants exhibit increased polyesterase activity and enhanced thermostability as compared to wild-type *P. mendocina* cutinase, and cancelled Claims 2 and 29 without prejudice. Indeed, Applicants reserve the right to prosecute any and/or all of the cancelled and/or amended Claims in one or more subsequently filed application(s). The present Claims recite specific substitutions at position 192 and additional mutations, as well as specific substitutions at position 194 and additional mutations. Applicants respectfully submit

that the present Claims find more than sufficient support in the Specification as filed and request that the present rejection be withdrawn and the Claims be allowed.

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### CONCLUSION

In view of the above remarks, the Applicants believe the pending Claims are in condition for allowance and issuance of a formal Notice of Allowance at an early date is respectfully requested. If a telephone conference would expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (650) 846-5838.

Respectfully submitted,

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